OGDEN ARSENAL, WAREHOUSE
(OGDEN ARSENAL, BUILDING 1420)
(OGDEN ARSENAL, PAINT & STENCIL BUILDING)
(OGDEN ARSENAL, MISSILE ASSEMBLY SHOP)
6150 Lemon Lane
Layton Vicinity
Davis County
Utah

HAER NO. UT-84-Z

HAER

UTAH

6-LAY.VI

## **PHOTOGRAPHS**

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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## HISTORIC AMERICAN ENGINEERING RECORD

OGDEN ARSENAL, WAREHOUSE (OGDEN ARSENAL, BUILDING 1420) (OGDEN ARSENAL, PAINT & STENCIL BUILDING) (OGDEN ARSENAL, MISSILE ASSEMBLY SHOP) HAER UTAH 6-LAY.V, 12-

HAER No. UT-84-Z

Location:

6150 Lemon Lane, Hill Air Force Base, Layton Vicinity, Davis County, Utah

UTM: 12-415310-4554260

Date of Construction: 1938

Architect:

Unknown

**Builder:** 

Unknown

Present Owner: Hill Air Force Base

Present Use: Missile Assembly Shop

Significance:

Building 1420 is one of only two buildings that remaining from Ogden Arsenal's World War II Bomb Loading Plant. Loaded bombs were painted and labeled in Building 1420, a process that protected them from rust damage while in storage or in the field. This building, along with other structures at the base, renders a unique picture of the U.S. Army build-up which occurred on the eve of and during World War II.

History:

Building 1420 was built in 1938 as part of the WPA Arsenal reconstruction after a 1927 windstorm destroyed most of the original structures. Although this building was originally a warehouse, it became part of the Bomb Loading Plant in 1939. The Bomb Loading Plant was the first production plant completed at the newly re-opened Ogden Arsenal. In the first months of production, completed 100-pound Amatol/TNT bombs were painted and labeled (with lot number, date, and manufacturer) in Building 1420 immediately before they were packed and crated for storage or shipment. Painting was an essential step in the production of bombs because it sealed the metal and protected bombs from rust damage.

The bombs were marked with the lot number, date, and manufacturer using rubber stamps and lithographic quick-drying ink. Small round brushes were used to paint yellow stripes on the nose and tail of 100 pound Amatol/TNT bombs. These markings were painted on manually using a roller device that was powered with a small air motor that rotated the bomb body.

This process was replaced in early 1941 by a safer method that required less handling of the loaded bombs. In the newer process, empty bomb bodies were dismantled and suspended in a vertical position on an overhead, power driven conveyor line in the Loading and Assembly Building. Lifting devices were inserted in the tail of the bombs, which were given one coat of lusterless olive drab ammunition paint. The painting was done in a DeVilbis water wash paint spray booth by two manually operated spray guns. The overhead conveyor was designed to permit complete drying of the painted bomb bodies before they were removed from the conveyor. Dry bombs were removed and placed on hardwood boats on a roller conveyor line. The interior of the bombs were painted with acid proof black paint.

The people who worked in Building 1420 wore special masks and coveralls, but no accommodations were made to the building's ventilation system when it was designated as a paint and stencil building in 1939.

## General

Description:

Building 1420 (80' x 50') is a one-story, gable-roofed building located in the original Bomb Loading Plant Area. It is elevated on concrete piers and accessed by steps on the south side or a ramp on the west side. A loading platform wraps around all four sides of the building. The building is divided in half by a concrete fire wall which extends through the roof line. The present roof appears to be in sheets of asbestos panels. A shed-roofed canopy on the south side extends across the length of the facade and is composed of 6 "I" beams and exposed trusses. Lightening aerials line the ridge of the roof. The south elevation contains a single entry door on the west and two large industrial windows in the two other bays. The west elevation contains a single door and a double loading door.

Minor additions include a concrete block room added to the west platform and a shed-roofed entry added to the north. The gable roof that was originally covered with mineral surface asphalt was re-roofed with cement asbestos shingles before 1957.

